



Water Conveyance

Client
City of Toronto

Location
Toronto, Ontario, Canada

CH2M HILL was one of five technical consulting teams selected to provide engineering services for the development of the City of Toronto (City) Wet Weather Flow Management Master Plan (WWFMMP). The WWFMMP, designed on a watershed basis, details a consistent approach for the virtual elimination of combined sewer overflows (CSOs) and the control of stormwater discharges across the City, for the prevention, control, and reduction of wet weather flow impacts.

Wet Weather Flow Management Master Plan Combined Sewer Study Area

Project Description

CH2M HILL, in conjunction with MacViro Consultants Inc., (the team) was responsible for identifying the preferred strategy for wet weather flow management in the CSO area of the City.

While developing the WWFMMP, the team followed the planning principles of the Environmental Assessment Act, as detailed in the Class Environmental Assessment for Municipal Water and Wastewater Projects. The WWFMMP was created to incorporate the development of stream- and lake-based water quality targets that the City aims to achieve, and included an extensive review of existing conditions and options for controlling wet weather flows. Flow control alternatives considered by the team for the master plan followed the hierarchy of source control, conveyance control, and end-of-pipe controls. Overall wet weather management strategies were developed, evaluated, and modelled by the team to determine each strategy's ability to meet water quality targets. A preferred strategy was selected based on the modelling results and an evaluation of the technical, social, natural and cost implications of the alternatives was completed. The team developed a 25-year implementation plan for the preferred strategy, including a description of costs and a schedule for proposed works.

The City's steering committee, consisting of approximately two dozen representatives from agencies and public interest groups, directed the project. In addition, the firm engaged in extensive public and stakeholder consultation throughout the process, which included hosting several workshops, directing focus group meetings, and distributing information bulletins.

CH2M HILL took a lead role in developing and presenting assessment process and CSO study area results to the steering committee and public/stakeholder groups.